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EXAMINER	
PASIA, REDENTOR M	
ART UNIT	**PAPER NUMBER**
2616	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/718,529	SIERECKI, EDWARD ALAN	
	Examiner	Art Unit	
	REDENTOR M. PASIA	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on March 28, 2008 has been entered. Claims 1, 8, and 14 have been amended. No claims have been canceled. No claims have been added. Claims 1-18 are still pending in this application, with claims 1, 8, and 14 being independent.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 28, 2008 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 8, 10, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al. (US 6,928,049 B2; hereinafter Shabtay) in view of Pazy et al. (US 6,614,792 B1; hereinafter Pazy).

As to claim 1, Shabtay shows a multi service platform (Figure 1, stackable switch 20), comprising:

a layer two switching component (Figure 1, switches A-D; col. 13, line 65 to col. 14, line 8; the term bridging-device includes devices which perform tasks belonging to more than one layer of the OSI model. Such devices may belong primarily to layers other than layer 2 of the OSI model, and perform bridging between their ports in addition to their primary functions (e.g., routers of layer 3). In addition, such devices may be directed equally to tasks of more than one layer (e.g., layer 3 switches).) for terminating a layer two network (Figure 3, network 40; col. 13, line 65 to co. 14, lines 1; it is noted that the bridging devices may be implemented as layer 2 of the OSI models media access control units of an end station);

a layer three switching component (Figure 1, switches A-D; col. 13, line 65 to col. 14, line 8; the term bridging-device includes devices which perform tasks belonging to more than one layer of the OSI model. Such devices may belong primarily to layers other than layer 2 of the OSI model, and perform bridging between their ports in addition to their primary functions (e.g., routers of layer 3). In addition, such devices may be directed equally to tasks of more than one layer (e.g., layer 3 switches).); and

a physical loopback connecting the layer two switching component and the layer three switching component (Figure 1, links 24, 26),

wherein layer two capabilities and layer three capabilities are integrated together to re-route a circuit through the physical loopback, if there is a failure in the interface in the multi-service platform (Figure 1-2; col. 3, lines 10-19; managing a connectivity of a cluster of bridging devices including a plurality of links, including pre-designating at least one of the links as a redundant link which is blocked when all the other links are operative and connected in accordance with a predetermined scheme, determining connectivity data on the connectivity of the links in the cluster and activating or block the pre-designated redundant at least one link responsive to the connectivity data; col. 5, lines 24-26; each bridging devices 22, is connected to a control wire 30 which carries one or more signals indicative of the operation of the links.);

wherein in the event of failure, the layer two switching component forwards traffic via the loopback to the layer three switching component (Figure 1 and 2; Examiner notes that when applying the method set forth in Figure 2 into Figure 1 and assuming switch A is a layer 3 component (refer to above rejection regarding layer 3 component), when link 24' is not operational, switch B – a layer 2 switch, will utilize redundant link 26 (loopback) since ports related to 24' are blocked as shown in step 54), and the traffic is returned to the layer two switching component (Figure 1 and 2; Examiner also notes that upon re-stabilization (step 58), the ports related to the operative links are activate and thus allows normal operation of the modular bridging device wherein all of links 24 are being utilized and redundant link 26 is on standby.).

First, Shabtay shows a layer two switching component (as shown above) for terminating a layer two network, however, Shabtay does not explicitly show a layer two

switching component for terminating a layer two network having a plurality of layer two switches.

Second, Shabtay also emphasizes that the principles are also applied to entire local area networks an/or to other sub-networks (col. 13, lines 51-60) thus the redundancy can be applied to different devices/interfaces present in a particular network when a failure occurs not just on a modular bridge, but when the failure occurs at different location within the local area network or sub-network. Even though Shabtay has shown that the failure recovery mechanism when failure occurs in a local area network/sub-network and has also shown the multi-service platform (as shown in above rejections), Shabtay does not explicitly show that the failure occurs between one of the layer two switches and the multi-service platform since Shabtay does not show the plurality of layer two switches

Lastly, Shabtay does not specifically show that the layer three switching component, performs a look up to determine the destination of the traffic and routed to its destination via a different layer-two switch.

Pazy shows a Multiprotocol Over ATM (MPOA) client (referred to as MPC) which provides high-performance, scalable layer 3-forwarding in a routed environment (col. 1, line 66 to col. 2, line 2).

Pazy shows a plurality of layer two switches and also the MPC for terminating a layer two network having a plurality of layer two switches (Figures 3-7). Pazy further shows that the layer three switching component, performs a look up to determine the destination of the traffic and routed to its destination via a different layer two switch (col.

6, lines 23-38; If the packet is to be routed, it contains the destination MAC address of the next-hop router. If the packet is to be routed, the MFC examines the destination network layer address of the packet and resolves this to the correct ATM address based on information received from the MPOA server. The MFC then establishes a switched virtual circuit (SVC) to the ATM destination or uses an existing one. If the packet is destined to a host in the same subnet so that it can be bridged, the MFC will utilize LANE to resolve that ATM address and will either use an existing SVC to the destination or establish a new one; col. 7, lines 20-33; LEC #2 is the LEC that services the router 46 on subnet 20 #1. LEC #2 sends the frame to the upper layer (Layer 3) for forwarding. Note that the MAC address of the router is already known and a DDVC 42 to it was previously established. The DDVC is set up when frames arrive at LEC #1 having a MAC destination address of the router (which was 25 previously discovered using standard LANE LE_ARP). At the router 46, the packet is handled in the normal manner, i.e., the IP destination address is examined and standard routing is performed. The frame is then processed by the router 46 which, after performing the forwarding 30 operation, sends the frame to LEC #3 which serves subnet #2. LEC #3, in turn, forwards the frame to LEC #4 via DDVC 44 between nodes 50, 52. Finally, the frame is forwarded to end station B attached to edge device 48.). Since, Pazy shows the plurality of layer 2 switches, the claim limitation that there is a failure in the interface between a layer two switch and the platform is obvious under the combination of Shabtay in view of Pazy.

With the above features shown by Pazy, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shabtay to include the specific/explicit features of Pazy, in order to allow efficient inter-subnet communications (col. 2, lines 54-55).

As to claim 8, Shabtay shows at least one platform (Figure 1, stackable switch 20) including a layer two switching component (Figure 1, switches A-D; col. 13, line 65 to col. 14, line 8; the term bridging-device includes devices which perform tasks belonging to more than one layer of the OSI model. Such devices may belong primarily to layers other than layer 2 of the OSI model, and perform bridging between their ports in addition to their primary functions (e.g., routers of layer 3). In addition, such devices may be directed equally to tasks of more than one layer (e.g., layer 3 switches).) for terminating a layer two network (Figure 3, network 40; col. 13, line 65 to co. 14, lines 1; it is noted that the bridging devices may be implemented as layer 2 of the OSI models media access control units of an end station);

a layer three switching component (Figure 1, switches A-D; col. 13, line 65 to col. 14, line 8; the term bridging-device includes devices which perform tasks belonging to more than one layer of the OSI model. Such devices may belong primarily to layers other than layer 2 of the OSI model, and perform bridging between their ports in addition to their primary functions (e.g., routers of layer 3). In addition, such devices may be directed equally to tasks of more than one layer (e.g., layer 3 switches).) and a physical loopback between the layer two switching component and the layer three switching component (Figure 1, links 24, 26); and

wherein a failure of the connection, which extends to the platform, is protected by layer two network failure restoration by re-routing a circuit through the physical loopback (Figure 1-2; col. 3, lines 10-19; managing a connectivity of a cluster of bridging devices including a plurality of links, including pre-designating at least one of the links as a redundant link which is blocked when all the other links are operative and connected in accordance with a predetermined scheme, determining connectivity data on the connectivity of the links in the cluster and activating or block the pre-designated redundant at least one link responsive to the connectivity data; col. 5, lines 24-26; each bridging devices 22, is connected to a control wire 30 which carries one or more signals indicative of the operation of the links; col. 13, line 51 to col. 14, line 8);

wherein in the event of failure, the layer two switching component forwards traffic via the loopback to the layer three switching component (Figure 1 and 2; Examiner notes that when applying the method set forth in Figure 2 into Figure 1 and assuming switch A is a layer 3 component (refer to above rejection regarding layer 3 component), when link 24' is not operational, switch B – a layer 2 switch, will utilize redundant link 26 (loopback) since ports related to 24' are blocked as shown in step 54), and the traffic is returned to the layer two switching component (Figure 1 and 2; Examiner also notes that upon re-stabilization (step 58), the ports related to the operative links are activate and thus allows normal operation of the modular bridging device wherein all of links 24 are being utilized and redundant link 26 is on standby.).

First, Shabtay does not explicitly show a network, comprising: a plurality of layer two switches.

Second, Shabtay shows the layer two component in the platform as shown in the above rejection, however, Shabtay does not explicitly show at least one connection between one of the layer two switches, which communicates with a customer edge device, and the layer two switching component of the platform.

Third, Shabtay also emphasizes that the principles are also applied to entire local area networks an/or to other sub-networks (col. 13, lines 51-60) thus the redundancy can be applied to different devices/interfaces present in a particular network when a failure occurs not just on a modular bridge, but when the failure occurs at different location within the local area network or sub-network. Even though Shabtay has shown that the failure recovery mechanism when failure occurs in a local area network/sub-network and has also shown the multi-service platform (as shown in above rejections), Shabtay does not explicitly show that there is a failure in the interface between a layer two switch and the platform since Shabtay does not show the plurality of layer two switches

Lastly, Shabtay does not specifically show that the layer three switching component, performs a look up to determine the destination of the traffic and routed to its destination via a different layer-two switch.

Pazy shows a Multi-protocol Over ATM (MPOA) client (referred to as MPC) which provides high-performance, scalable layer 3-forwarding in a routed environment (col. 1, line 66 to col. 2, line 2).

Pazy shows a network, comprising: a plurality of layer two switches (Figures 1-7, nodes 50, 52, 56, nodes). Pazy shows one connection between one of the layer two

switches (Figure 4, Data Direct Virtual Circuit (DDVC) 96, 98), which communicates with a customer edge device (Figure 4), Edge Device), and the layer two switching component of the platform (Figure 4). Pazy further shows that the layer three switching component, performs a look up to determine the destination of the traffic and routed to its destination via a different layer two switch (col. 6, lines 23-38; If the packet is to be routed, it contains the destination MAC address of the next-hop router. If the packet is to be routed, the MFC examines the destination network layer address of the packet and resolves this to the correct ATM address based on information received from the MPOA server. The MFC then establishes a switched virtual circuit (SVC) to the ATM destination or uses an existing one. If the packet is destined to a host in the same subnet so that it can be bridged, the MFC will utilize LANE to resolve that ATM address and will either use an existing SVC to the destination or establish a new one; col. 7, lines 20-33; LEC #2 is the LEC that services the router 46 on subnet 20 #1. LEC #2 sends the frame to the upper layer (Layer 3) for forwarding. Note that the MAC address of the router is already known and a DDVC 42 to it was previously established. The DDVC is set up when frames arrive at LEC #1 having a MAC destination address of the router (which was 25 previously discovered using standards LANE LE_ARP). At the router 46, the packet is handled in the normal manner, i.e., the IP destination address is examined and standard routing is performed. The frame is then processed by the router 46 which, after performing the forwarding 30 operation, sends the frame to LEC #3 which serves subnet #2. LEC #3, in turn, forwards the frame to LEC #4 via DDVC 44 between nodes 50, 52. Finally, the frame is forwarded to end station B attached to edge

device 48.). Since, Pazy shows the plurality of layer 2 switches, the claim limitation that there is a failure in the interface between a layer two switch and the platform is obvious under the combination of Shabtay in view of Pazy.

With the above features shown by Pazy, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shabtay to include the specific/explicit features of Pazy, in order to allow efficient inter-subnet communications (col. 2, lines 54-55).

As to claim 10, modified Shabtay shows that the layer two network switches comprise ATM switches (Figure 3; nodes 50, 52 56 in an ATM network).

As to claim 14, Shabtay shows a method for routing traffic across a layer two network having layer three routing capabilities (col. 13, line 51 to col. 14, line 8; also refer to claim 1 and 8 rejections), comprising:

a layer two switching component in a platform; routing traffic from the layer two switching component across a physical loopback to a layer three switching component in the platform; returning the traffic to the layer two switching component; wherein a circuit is re-routed through the physical loopback, if there is a failure in the interface in the multi-service platform (refer to claims 1 and 8 rejections).

First, Shabtay shows a layer two switching component in a platform (as shown in the above rejection), however, Shabtay does not specifically show routing traffic from a customer across the layer-two network.

Second, Shabtay does not show performing a look up of a destination of the traffic; determining, at the layer three switching component, where to route the traffic; forwarding the traffic to a destination based upon the determined route.

Lastly, even though Shabtay shows wherein a circuit is re-routed through the physical loopback, if there is a failure in the interface in the multi-service platform (as shown above). However, Shabtay does not show that the failure occurs in the interface between a layer two switch and the platform.

Pazy shows a Multi-protocol Over ATM (MPOA) client (referred to as MPC) which provides high-performance, scalable layer 3-forwarding in a routed environment (col. 1, line 66 to col. 2, line 2).

Pazy shows routing traffic from a customer across the layer two network (Figures 3-7; abstract); performing a look up of a destination of the traffic (col. 6, lines 23-31; If the packet is to be routed, it contains the destination MAC address of the next-hop router. If the packet is to be routed, the MFC examines the destination network layer address of the packet and resolves this to the correct ATM address based on information received from the MPOA server. The MFC then establishes a switched virtual circuit (SVC) to the ATM destination or uses an existing one. If the packet is destined to a host in the same subnet so that it can be bridged, the MFC will utilize LANE to resolve that ATM address and will either use an existing SVC to the destination or establish a new one); determining, at the layer three switching component, where to route the traffic and forwarding the traffic to a destination based upon the determined route (col. 7, lines 20-33; LEC #2 is the LEC that services the router 46 on subnet 20

#1. LEC #2 sends the frame to the upper layer (Layer 3) for forwarding. Note that the MAC address of the router is already known and a DDVC 42 to it was previously established. The DDVC is set up when frames arrive at LEC #1 having a MAC destination address of the router (which was 25 previously discovered using standard LANE LE_ARP). At the router 46, the packet is handled in the normal manner, i.e., the IP destination address is examined and standard routing is performed. The frame is then processed by the router 46 which, after performing the forwarding 30 operation, sends the frame to LEC #3 which serves subnet #2. LEC #3, in turn, forwards the frame to LEC #4 via DDVC 44 between nodes 50, 52. Finally, the frame is forwarded to end station B attached to edge device 48.). Also, Pazy shows a layer two switch (Figures 3-7). Since, Pazy shows layer 2 switches, the claim limitation that there is a failure in the interface between a layer two switch and the platform is obvious under the combination of Shabtay in view of Pazy.

With the above features shown by Pazy, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shabtay to include the specific/explicit features of Pazy, in order to allow efficient inter-subnet communications (col. 2, lines 54-55).

As to claim 15, modified Shabtay shows that the layer two network comprises an ATM network (Pazy: Figure 3, ATM network).

5. Claims 2-5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al. (US 6,928,049 B2; hereinafter Shabtay) in view of Pazy et al. (US

6,614,792 B1; hereinafter Pazy) in further view of DiMambro et al. (US 2004/0143781 A1; hereinafter DiMambro).

As to claim 2, modified Shabtay shows that the loopback comprises a cable (col. 9, lines 62-63), however modified Shabtay does not specifically show that the cable is a fiber jumper cable.

DiMambro shows a fiber jumper cable (Par. 0021; that Port 120 allows the adapter to be couple to a suitable communication link (e.g. fiber) and that the loopback plug maybe connected in Port 120 as shown in Figure 1.). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of modified Shabtay to include the specific feature of DiMambro in order to provide a non-intrusive loopback testing in a system (Par. 0018).

As to claim 3, modified Shabtay shows that the bridging device includes devices which performs tasks belonging to more than one layer of the OSI model and such devices may belong primarily to layer others than layer 2 of the OSI model, and **perform bridging between their ports in addition to their primary functions (e.g. routers of layer 3)**. Still, even with the above features, modified Shabtay does not specifically show that the layer two switching component and the layer three switching component are comprised in a line card.

DiMambro shows that **Network Interface Cards (NIC)** are able to perform some type of loopback testing to test the device's transmit and receive components or modules (Par. 0002). DiMambro shows a **NIC** (Figure 1) which is configured for Ethernet (layer 2) communications (Par. 0020) as well as layer 3 communications

(Figure 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of modified Shabtay to incorporate various switches of Shabtay along with the related functions and redundancy into the line card of DiMambro in order to provide a non-intrusive loopback testing in a system (Par. 0018).

As to claim 4, further modified Shabtay shows that both ends of the loopback terminate on the line card (DiMambro: Figure 1).

As to claim 5, further modified Shabtay shows at least one additional physical loopback (Shabtay: Figure 1 shows a plurality of loopbacks 24) connecting to another layer three switching component on the line card, wherein redundancy for the layer three functionality is provided on the line card (Shabtay: col. 13, line 65 to col. 14, line 8; the term bridging-device includes devices which perform tasks belonging to more than one layer of the OSI model. Such devices may belong primarily to layers other than layer 2 of the OSI model, and perform bridging between their ports in addition to their primary functions (e.g., routers of layer 3). In addition, such devices may be directed equally to tasks of more than one layer (e.g., layer 3 switches); Examiner notes that Shabtay shows multiple switches A-D which can be implemented as a layer 2 switch or a layer 3 router, or combination; by having shown multiple switches, Shabtay also shows redundancy of layer 3 functionality. It is also further noted that Shabtay's switches were combined (refer to claim 3 rejection) with the features of DiMambro).

As to claim 9, this claim is rejected using the same reasoning set forth in the rejection of claim 2.

6. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al. (US 6,928,049 B2; hereinafter Shabtay) in view of Pazy et al. (US 6,614,792 B1; hereinafter Pazy) and DiMambro et al (US 2004/0143781 A1; hereinafter DiMambro), and in further view of Zheng et al. (US 6,611,522; hereinafter Zheng).

As to claim 6, further modified Shabtay shows additional layer two and layer 3 switching components (Figure 1, C and D; col. 13, line 65 to col. 14, line 8). However, further modified Shabtay does not specifically show at least one additional line card (comprising at least one additional layer two switching component and at least one additional layer three switching component), wherein the at least one additional line card provides redundancy.

Zheng shows at least one additional line card wherein the at least one additional line card provides redundancy (Figures 1-2, 4, 9 13; shows switching shelf 12 that comprises a plurality of line cards, each line card with a layer 2 switching component (ATM lookup 220) and a layer 3 switching component (IP Route Lookup 244); As shown in Figure 9, there are multiple line cards, hence the presence of an additional line card can be regarded as also providing redundancy.). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of further modified Shabtay to include the features of Zheng as shown above, in order to provide QoS features which are capable of accommodating emerging technologies, in a single communications node (col. 2, lines 26-28).

As to claim 7, further modified Shabtay shows at least one additional physical loopback terminating on the at least one additional line card (Zheng: interconnect 62, connected to line cards 130-138).

7. Claims 11-13, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al. (US 6,928,049 B2; hereinafter Shabtay) in view of Pazy et al. (US 6,614,792 B1; hereinafter Pazy) in further view of Zheng et al. (US 6,611,522; hereinafter Zheng).

As to claim 11, modified Shabtay shows all of the elements except at least one connection comprises a permanent virtual connection (PVC).

Zheng shows a permanent virtual connection (PVC) (Figure 13, VC 62). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of modified Shabtay to include the features of Zheng as shown above, in order to provide QoS features which are capable of accommodating emerging technologies, in a single communications node (col. 2, lines 26-28).

As to claim 12, modified Shabtay the term bridging-device includes devices which perform tasks belonging to more than one layer of the OSI model; may belong primarily to layers other than layer 2 of the OSI model, and perform bridging between their ports in addition to their primary functions (e.g., routers of layer 3); may be directed equally to tasks of more than one layer (e.g., layer 3 switches) (col. 13, line 65 to col. 14, line 8). However, modified Shabtay does not specifically show that the layer two switching component of the platform comprises an ATM switch.

Zheng shows that the communications node provides ATM cell forwarding facility (col. 8, lines 4-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of modified Shabtay to include the features of Zheng as shown above, in order to provide QoS features which are capable of accommodating emerging technologies, in a single communications node (col. 2, lines 26-28).

As to claim 13, modified Shabtay the term bridging-device includes devices which perform tasks belonging to more than one layer of the OSI model; may belong primarily to layers other than layer 2 of the OSI model, and perform bridging between their ports in addition to their primary functions (e.g., routers of layer 3); may be directed equally to tasks of more than one layer (e.g., layer 3 switches) (col. 13, line 65 to col. 14, line 8). However, modified Shabtay does not specifically show that the layer three switching component of the platform comprises an IP router.

Zheng shows that the communications node provides IP packet forwarding facility (col. 8, lines 4-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of modified Shabtay to include the features of Zheng as shown above, in order to provide QoS features which are capable of accommodating emerging technologies, in a single communications node (col. 2, lines 26-28).

As to claim 16, modified Shabtay shows that the bridging device includes devices which performs tasks belonging to more than one layer of the OSI model and such devices may belong primarily to layer others than layer 2 of the OSI model, and

perform bridging between their ports in addition to their primary functions (e.g. routers of layer 3). Still, even with the above features, modified Shabtay does not specifically show that the layer two switching component and the layer three switching component are comprised in a line card.

Zheng shows that at that the layer two switching component of the platform comprises an ATM switch (Figures 1-2, 4, 9 13; shows switching shelf 12 that comprises a plurality of line cards, each line card with a layer 2 switching component (ATM lookup 220) and a layer 3 switching component (IP Route Lookup 244).). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of modified Shabtay to include the features of Zheng as shown above, in order to provide QoS features which are capable of accommodating emerging technologies, in a single communications node (col. 2, lines 26-28).

As to claims 17 and 18, these claims are rejected using the same reasoning set forth in the rejection of claims 12 and 13, respectively.

Response to Arguments

8. Applicant's arguments, see page 8 of Applicant's Remarks/Arguments, filed March 28, 2008, with respect to the rejection(s) of claim(s) 1, 8, 12-13 under provisional non-statutory double patenting rejection have been fully considered and the rejection has been withdrawn since the claims in the instant application has been amended that also overcomes the previous double patenting rejection.

9. Applicant's arguments, see page 9-13 of Applicant's Remarks/Arguments, filed March 28, 2008, with respect to the rejection(s) of claim(s) 1-13 under 35 U.S.C. § 103(a) as being unpatentable over ZHENG et al. in view of DiMAMBRO et al. and further in view of DRAKE, Jr. et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as noted in the following:

- Claims 1, 8, 10, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al. (US 6,928,049 B2; hereinafter Shabtay) in view of Pazy et al. (US 6,614,792 B1; hereinafter Pazy).
- Claims 2-5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al. (US 6,928,049 B2; hereinafter Shabtay) in view of Pazy et al. (US 6,614,792 B1; hereinafter Pazy) in further view of DiMambro et al. (US 2004/0143781 A1; hereinafter DiMambro).
- Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al. (US 6,928,049 B2; hereinafter Shabtay) in view of Pazy et al. (US 6,614,792 B1; hereinafter Pazy) in further view of DiMambro et al. (US 2004/0143781 A1; hereinafter DiMambro) in further view of Zheng et al. (US 6,611,522; hereinafter Zheng).
- Claims 11-13, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shabtay et al. (US 6,928,049 B2; hereinafter Shabtay) in view of Pazy et al. (US 6,614,792 B1; hereinafter Pazy) in further view of Zheng et al. (US 6,611,522; hereinafter Zheng).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,895,024 B1

US 6,909,720 B1

US 7,075,928 B1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REDENTOR M. PASIA whose telephone number is (571)272-9745. The examiner can normally be reached on M-F 7:30am to 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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